

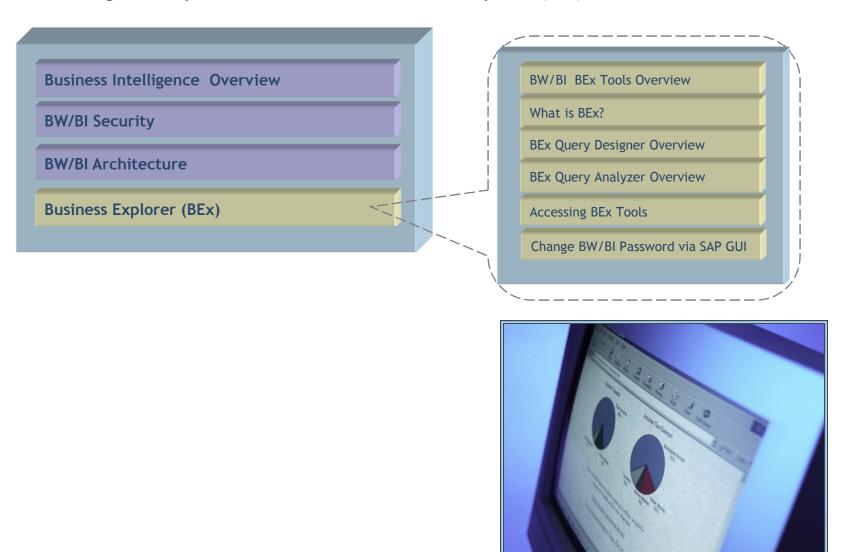
SAP Business Warehouse/Business Intelligence Reporting

Business Explorer (BEx)

Washington State HRMS Business
Warehouse/Business Intelligence (BW/BI)
BW/BI Power User Workshop Materials
General Topics - BW/BI Power Users

Business Explorer (BEx)

The following section provides an overview of Business Explorer (BEx).



BW/BI BEx Tools Overview

BW/BI Business Explorer (BEx) is a suite of tools used to create ad hoc queries and perform analysis of query results.

BEx Query Designer and BEx Query Analyzer are the two basic tools required for creating and analyzing ad hoc queries.

Topics covered in the BW/BI Business Explorer (BEx) section include:

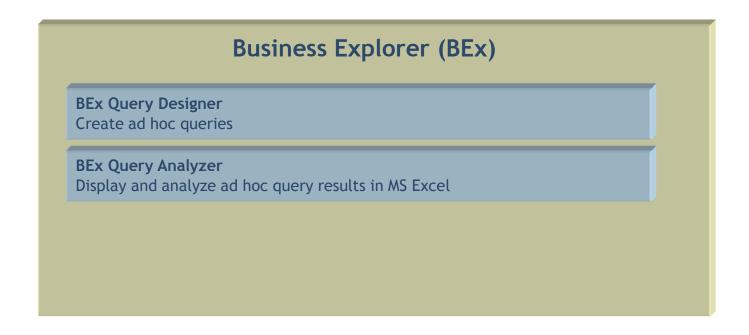
- What is BEx?
- BEx Query Designer Overview
- BEx Query Analyzer Overview
- Accessing BEx Tools via SAP GUI
- Change BW/BI Password via SAP GUI



What is BEx?

Business Explorer (BEx) is a suite of tools available to BW/BI Power Users through the SAP GUI to develop ad hoc queries and perform analysis of query results.

Following is a list of BEx tools in BW/BI:



BEx Query Analyzer Overview

Business Explorer (BEx)

BEx Query Designer

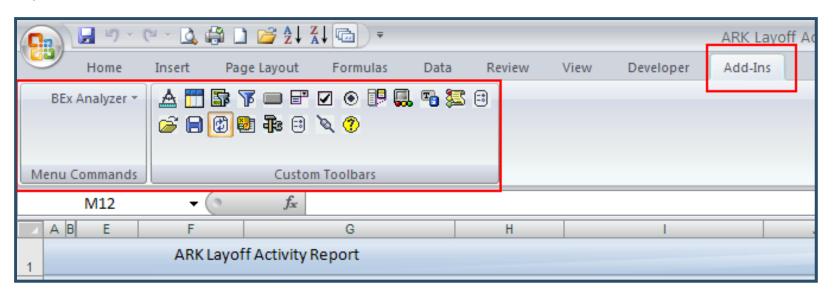
BEx Query Analyzer

BEx Query Analyzer is the tool used to analyze ad hoc query results in MS Excel. BEx Query Analyzer can be used to run ad hoc queries and open BEx Query Designer to create and modify ad hoc queries.

BEx Query Analyzer opens in MS Excel and provides its own toolbar and Business Explorer menu to perform query analysis.

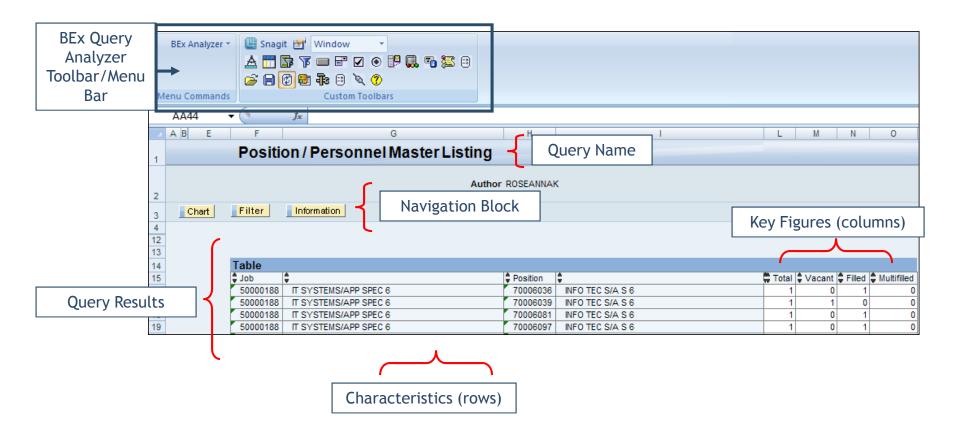
BEx Query Analyzer

- > Tool used to analyze ad hoc query results
- Uses MS Excel to display ad hoc query results
- Uses the BEx Query Analyzer toolbar in MS Excel for ad hoc queries



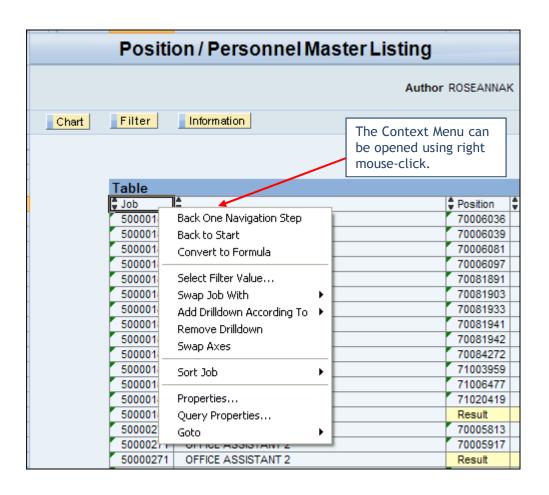
BEx Query Analyzer Overview

BEx Query Analyzer uses MS Excel to display query results. From MS Excel, users can sort, filter, drillup or drilldown on ad hoc query results. The example below uses a sample ad hoc query to display elements of query results from BEx Query Analyzer:



BEx Query Analyzer Overview

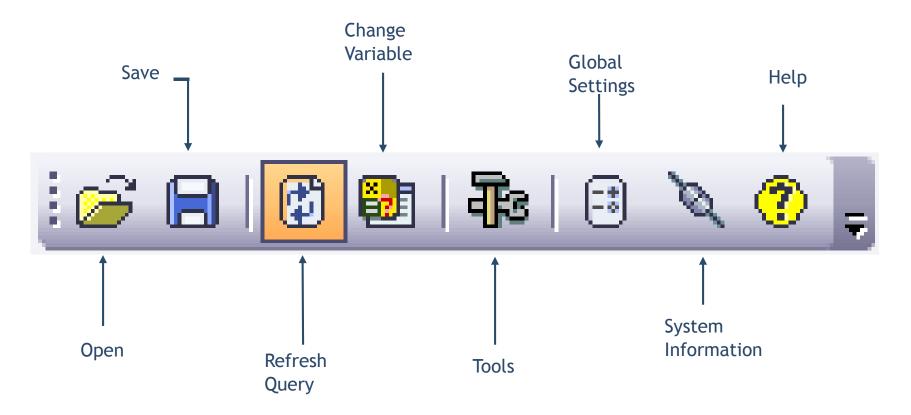
The Context Menu for query results can be opened using right mouse-click on an object in the query (such as a Characteristic or Key Figure).



BEx Query Analyzer Toolbar

Following is a quick reference to functionality of the toolbar options available through the BEx Analyzer reporting screen:

Note: These options are also available from the Business Explorer menu.



BEx Query Analyzer Toolbar

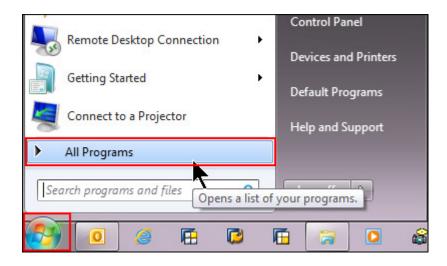
The table below describes the toolbar functionality in more detail.

	Open	Open an existing *workbook or query or to define a new query in an InfoProvider.
B	Save	Save query results.
3	Refresh	Refresh the query results. Note: A query can only be refreshed if a connection exists between BEx Analyzer and the Business Information Intelligence Server.
	Change Variable	Access the variable selection screen.
विंड	Tools	Launch a query in the Web browser, launch BEx Query Designer, insert a query (to attach multiple queries in one worksheet), copy a query to a new worksheet location, remove a query, remove/delete/detach queries in a *workbook or set SAP password protection on a query.
	Global Settings	Pause the automatic refresh of the query, terminate the connection between the query and the BW/BI server connection, display the BW/BI server information, perform various tasks on a new *workbook when it's embedded, apply a permanent *workbook template, turn the OLAP functions for right mouse clicking on or off, suppress warnings from the server, trace and display activities performed by a query.
Ø	System Information	Displays information about the system.
⑦	Help	Link to Business Explorer on-line help.

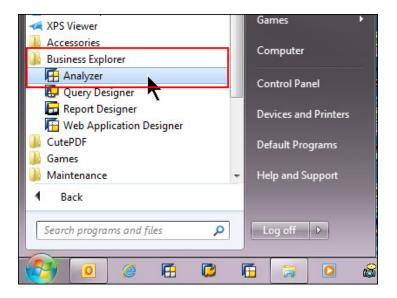
Accessing BEx Analyzer

To access BEx tools:

1. Select the Start menu \rightarrow All Programs:

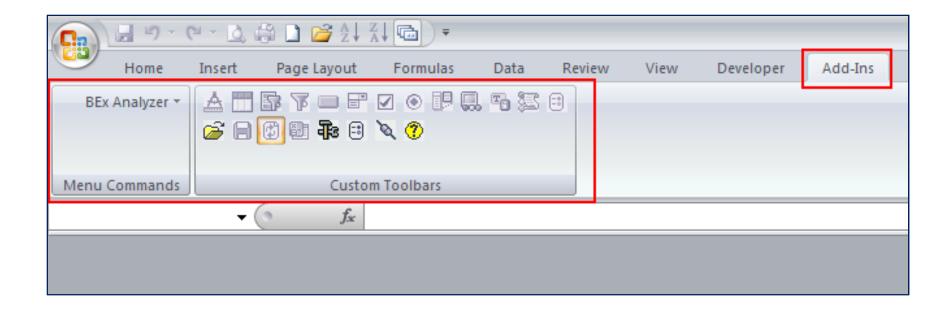


2. Select Business Explorer → Analyzer:



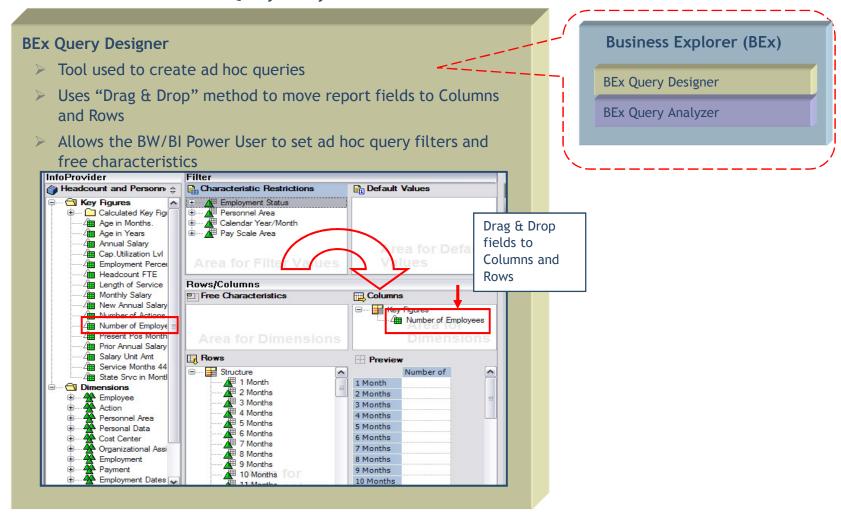
Accessing BEx Query Analyzer

Result: BEx Query Analyzer will be opened in MS Excel with the Business Explorer menu and BEx Query Analyzer toolbar enabled.



BEx Query Designer Overview

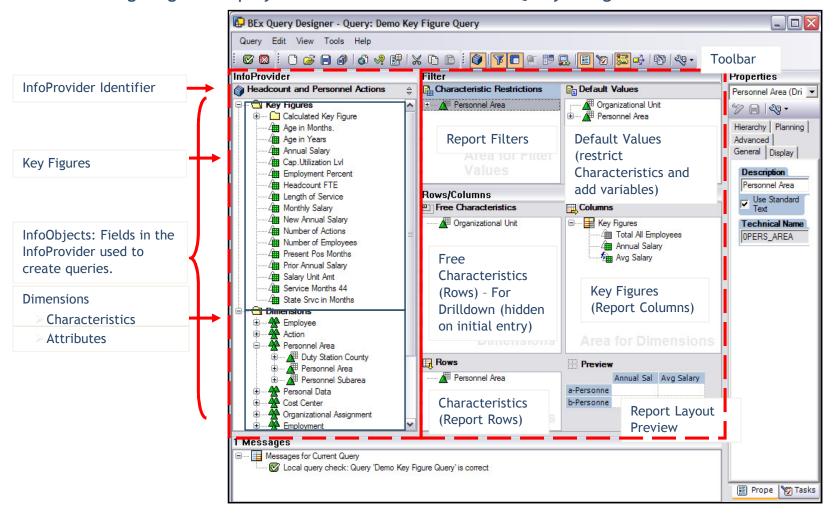
BEx Query Designer is the tool used to create ad hoc queries. BW/BI Power Users will create ad hoc queries in BEx Query Designer by using the "Drag&Drop" method of adding query data to the Rows, Columns, Filters and Free Characteristics section of the query. Once the ad hoc query is created, it can be run from a web browser or from BEx Query Analyzer:



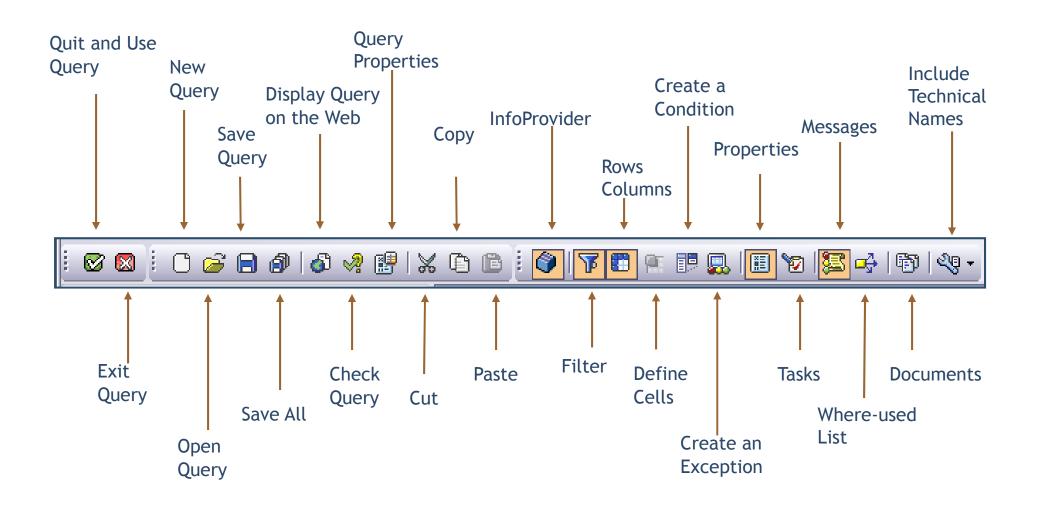
BEx Query Designer Overview

BEx Query Designer is a tool used to create ad hoc queries and is part of the BEx suite of tools. Ad hoc queries are comprised of Characteristics (usually in the Rows section), Free Characteristics, Key Figures (usually in the Columns section) and Filters.

The following diagram displays the main work area of BEx Query Designer:



BEx Query Designer Toolbar



BEx Query Designer Toolbar

The following table provides an overview of functions available from the BEx Query Designer Toolbar:

	Quit and Use Query	Execute the query in MS Excel (enabled only when BEx Query Designer is opened from BEx Query Analyzer).
X	Exit Query	Logoff and Exit BEx Query Designer.
	New Query	Create a new ad hoc query.
3	Open Query	Open an existing query.
	Save Query	Save the ad hoc query.
<u>a</u>	Save All	Save the ad hoc query.
5	Display Query on the Web	Execute the query on the web.
₽	Check Query	Before a new query is saved, use the <i>Check Query</i> command to check the query definition for errors.
	Query Properties	Set query properties such as the query description,
×	Cut	Cut object out of query.
	Сору	Copy object in query.
	Paste	Paste object that have been Cut or Copied in the query.

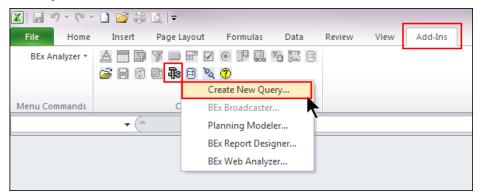
BEx Query Designer Toolbar

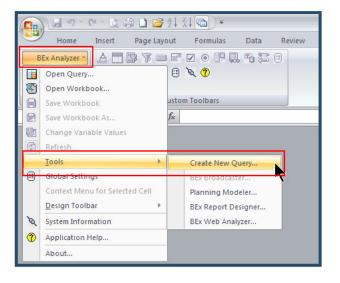
BEx Query Designer Toolbar overview

	InfoProvider	Select the InfoProvider pane.
1	Filter	Select the Filter pane.
	Rows/Columns	Select the Rows/Columns pane.
	Cells	Define formulas and selection conditions explicitly for cells in queries with two or more structures.
	Create a Condition	Create a condition for the ad hoc query.
	Create an Exception	Create an exception for the ad hoc query.
	Properties	Select the Properties pane.
1	Tasks	Select the Tasks pane.
\$	Messages	Select the Messages pane.
□ 2→	Where-used List	Check to see which objects (for example, workbooks) are using the current query.
F	Documents	Displays the documents pane.
ব্য	Technical Names	Show or hide the technical names of the query components.

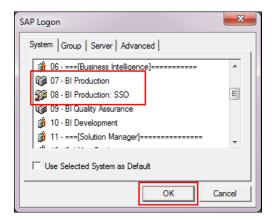
Accessing BEx Query Designer

Excel will open with an additional tab: Select Add-Ins → Tools or BEx Analyzer/Tools → Create New Query

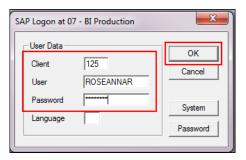




The SAP Logon is displayed. Select your option from the "Business Intelligence" section. (SSO is for single sign on).



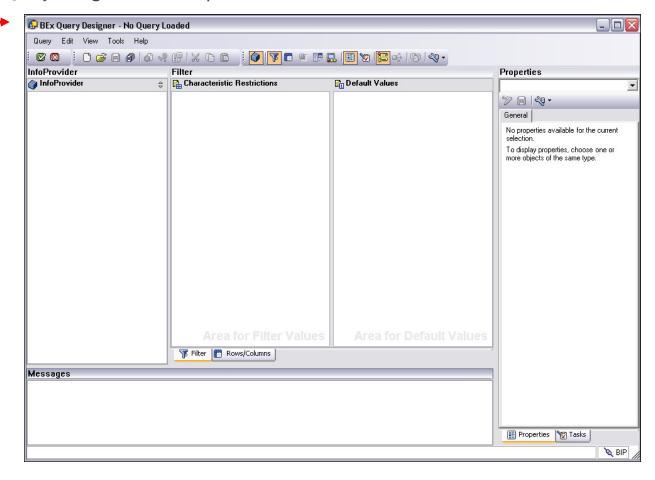
Enter your User and Password and select OK:



^{*}Contact your Agency Security User ID Administrator for BW/BI User ID and password-related information

Accessing BEx Query Designer

Result: BEx Query Designer will be opened Standard View.



SAP Logon 730

Log On

Name

Variable Logon..

To access BEx tools via SAP GUI:

Double-click the SAPlogon icon on the desktop.

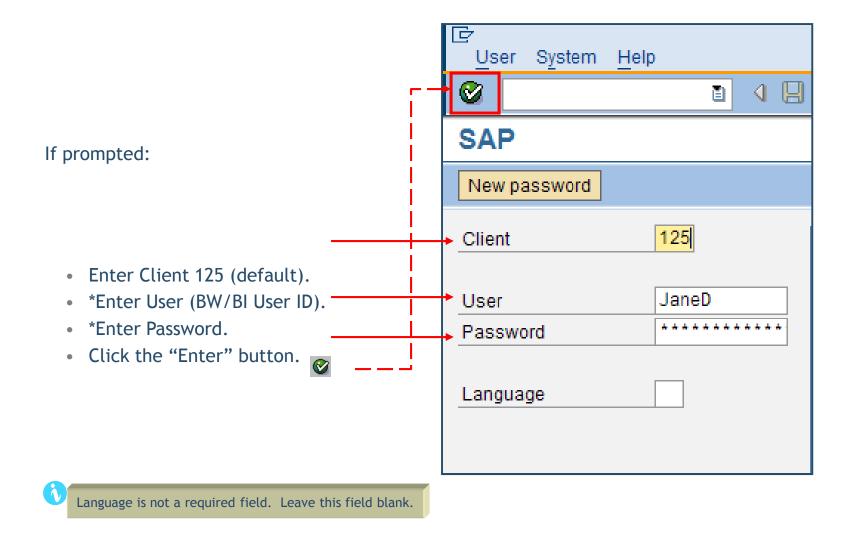
SAP Logon

******Current HRMS Systems***** 00 - ===[Human Capital Management] ====== 01 - HCM Production 02 - HCM Production: SSO 1 03 - HCM Quality Assurance 4 - HCM Development Under the Design of the Land o 106 - ===[Business Intelligence] ======= 07 - BI Production 08 - BI Production: SSO Result: The SAP Logon Pad will be displayed. U∷ 09 - BI Quality Assurance 10 - BI Development Double-click the HRMS Business FA 11 - ---[Solution Manager] Intelligence description. SSO at the end of the connection icon indicates it is a Single Sign On connection.

4 ▶

▲ System Desc. ▲

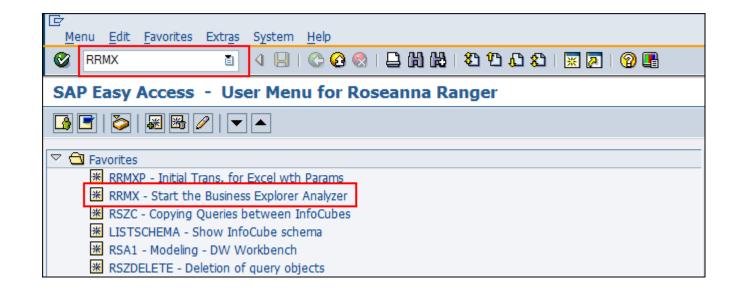
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^{*}Contact your Agency Security User ID Administrator for BW/BI User ID and password-related information

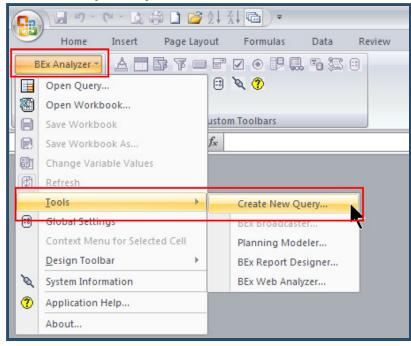
Result: User is logged on.

3. Double-click the "Start the Business Explorer Analyzer" link OR enter RRMX in the Command Field.



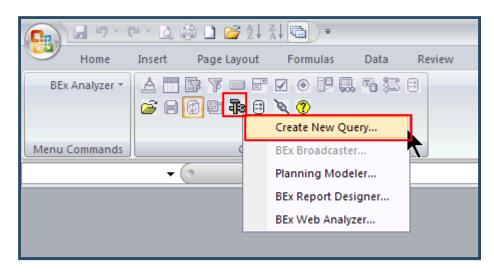
BEx Query Designer can be accessed from the Business Explorer menu or BEx Query Analyzer toolbar in

BEx Query Analyzer:

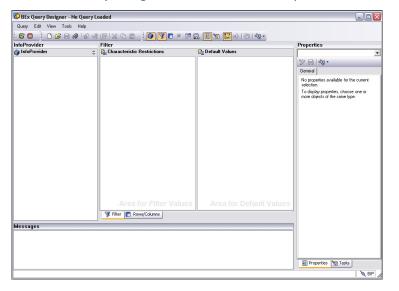


Access BEx Query Designer from the BEx Query Analyzer Toolbar

Result: BEx Query Designer will be opened.



Access BEx Query Designer from the Business Explorer menu



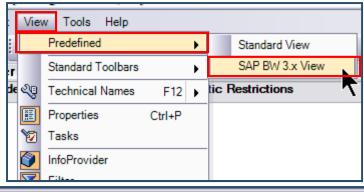
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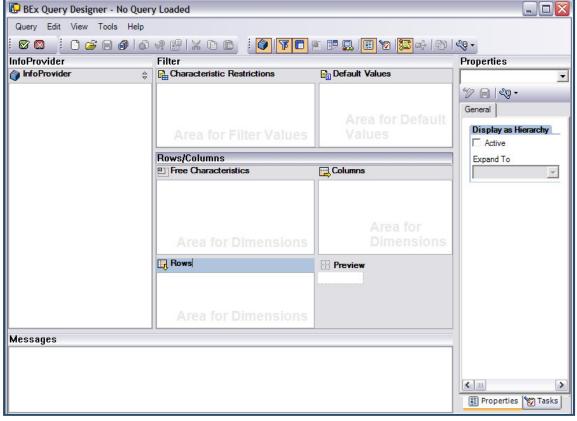
Accessing BEx Query Designer

To access the "SAP BW 3.x view: (which allows users to view all sections at one time)

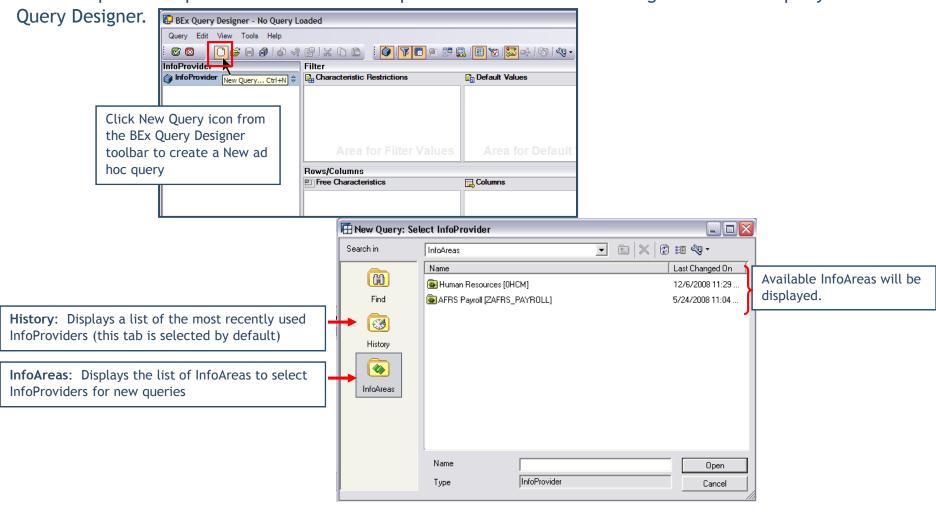
- 1. Click the "View" tab.
- 2. Select Predefined
- 3. Click Sap BW 3.x View

Result: BEx Query Designer will be opened in the SAP BW 3.x View.



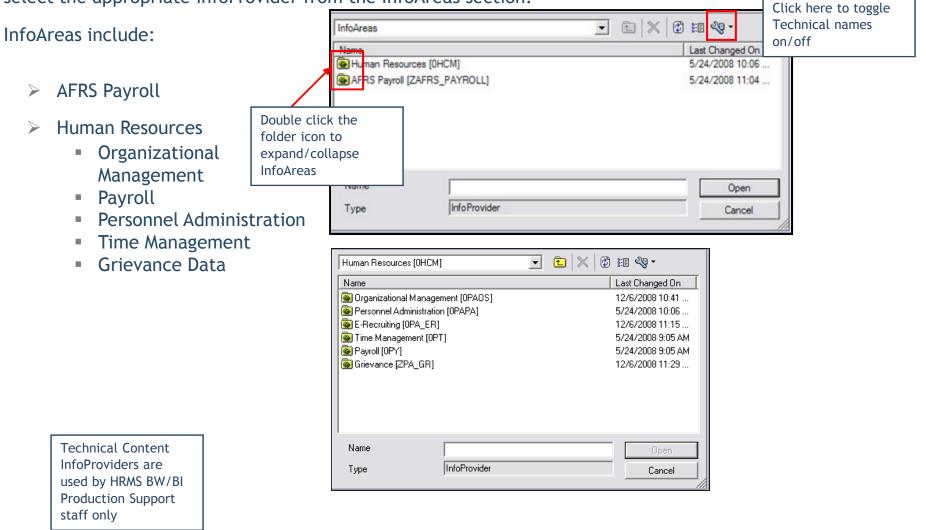


The example below provides an overview of options available when creating a new ad hoc query from BEx



Click InfoAreas when the "New Query: Select InfoProvider" screen is displayed. The History tab is selected by default.

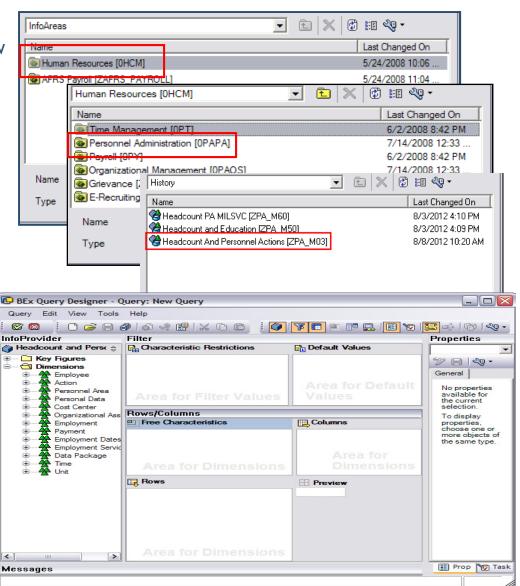
The Business Intelligence contains a list of InfoAreas with InfoProviders. To create a new ad hoc query, select the appropriate InfoProvider from the InfoAreas section.



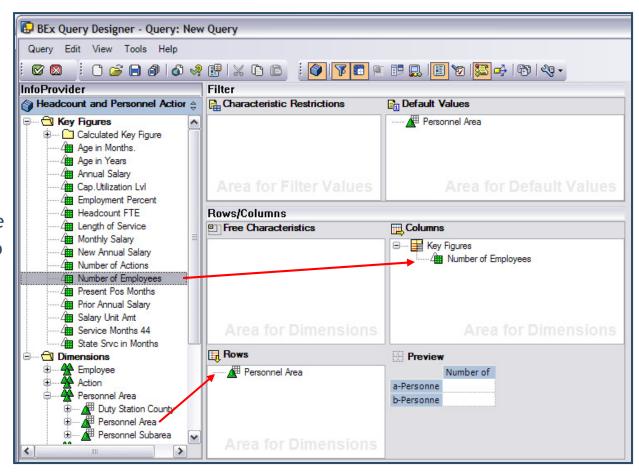
- 1. Select the InfoAreas tab from the "New Query Select InfoProvider" screen.
- 2. Expand the Human Resources InfoArea.
- 3. Expand the Personnel Administration InfoArea.
- 4. Select the Headcount and Personnel Actions InfoProvider.
- 5. Click OK.

Result: All InfoObjects of the Headcount and Personnel Actions InfoProvider are displayed in BEx Query Designer.

InfoObjects of the Headcount InfoProvider



- 6. Drag&Drop the Number of Employees Key Figure from the Key Figures section to the Columns section of the ad hoc query.
- 7. Drag&Drop the Personnel
 Area Characteristic from the
 Personnel Area Dimension to
 the Rows section of the ad
 hoc query.



Result: An ad hoc query has been created. See Saving an Ad Hoc query for information on Saving.

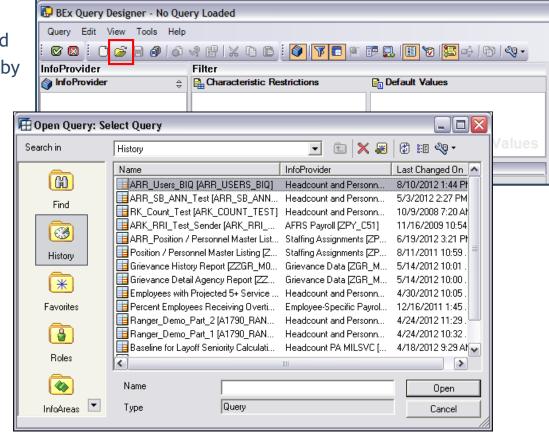
BW/BI Power Users have the ability to modify and delete ad hoc queries they have created. Ad hoc queries saved as Agency-specific queries can be opened as read-only in BEx Query Designer and run by other BW/BI Power Users in the same agency.

Note: BW/BI Power Users can open and save a read-only ad hoc query created by another BW/BI Power User as a new query.

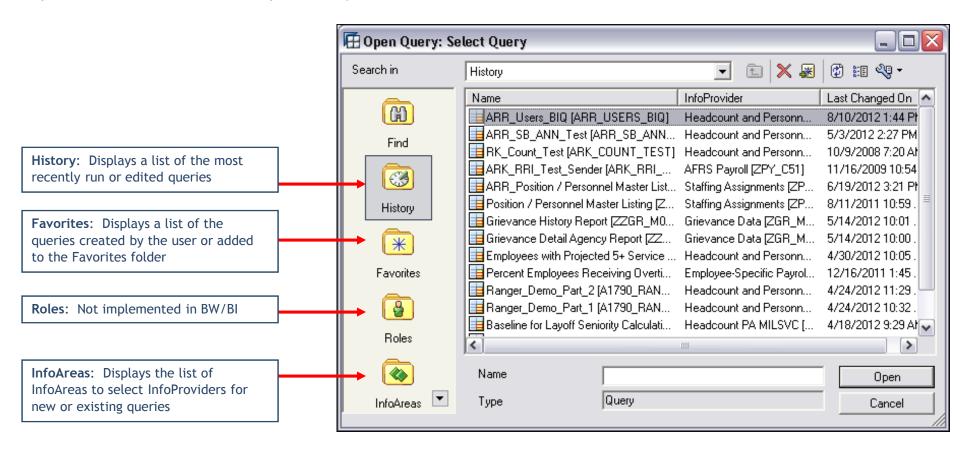
To open an ad hoc query, click the Open Query icon from BEx Query Designer.

Result: the Open Query screen will be displayed.

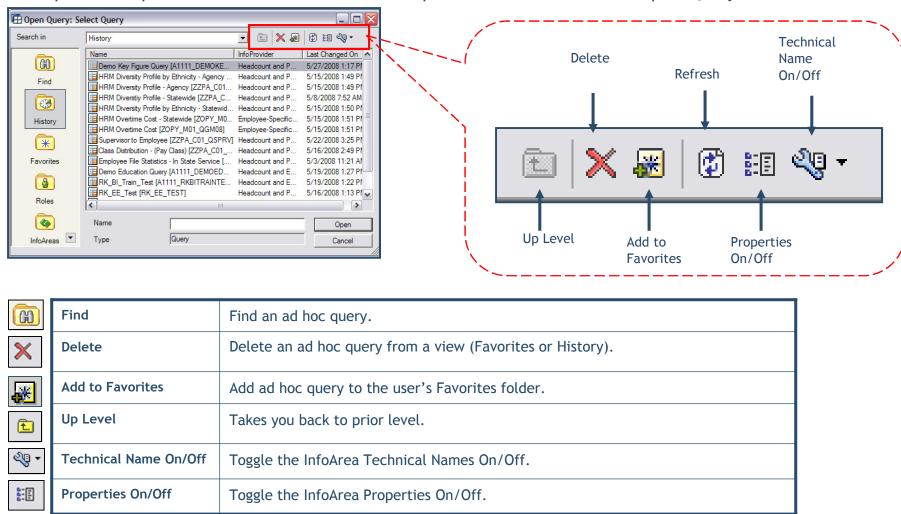
The History tab will be selected by default.



The Open Query screen will default to the History tab. The example below provides an overview of tab options available from the Open Query screen.



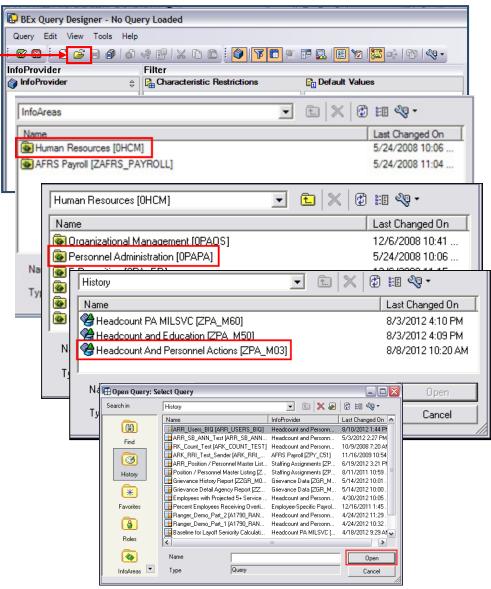
In addition to the Open Query tab options, the Open Query screen will display toolbar options. The example below provides an overview of toolbar options available from the Open Query screen.



The example below uses a sample ad hoc query from the Headcount InfoProvider to show how to open

and run an ad hoc query from BEx Query Designer:

- 1. From BEx Query Designer, click the Open Query icon .
- Click on the InfoAreas tab.
- 3. Expand the Human Resources InfoArea.
- 4. Expand the Personnel Administration InfoArea.
- Expand the Headcount and Personnel Actions InfoProvider.
- 6. Find the query you want to open, select it.
- 7. Click Open.



Result: The sample ad hoc query ("Demo Key Figure Query") has been opened in BEx Query Designer.

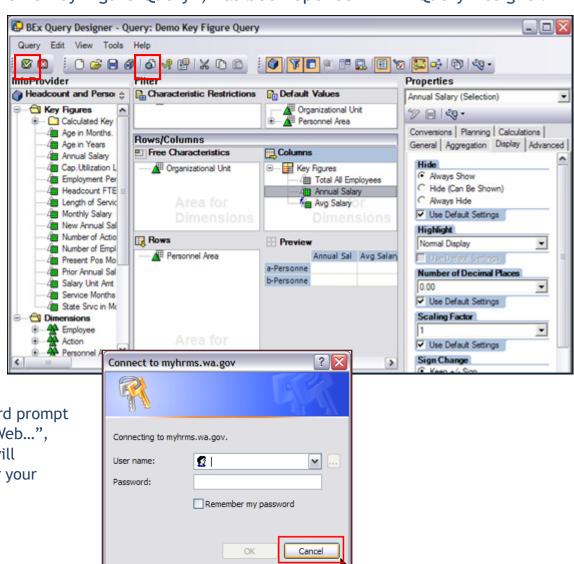
To run the ad hoc query:

Click the "Execute Query on the Web..." icon through Internet Explorer.

OR

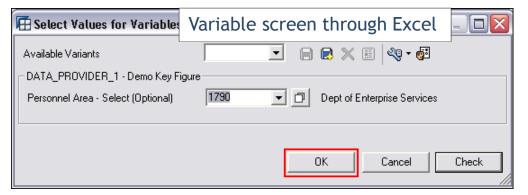
Click the "Exit and use the query" icon to generate your report through Excel.

Note: If you get this userid and password prompt when using the "Execute Query on the Web...", click **Cancel**. The Portal log on screen will display. That is where you need to enter your userid and password.



- 1. Enter Variable values, if applicable.
- 2. Click OK.

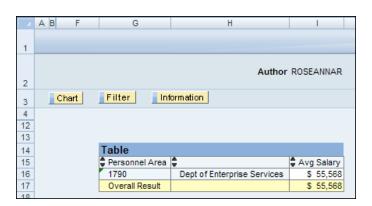




The Demo Key Figure query displayed on the Web

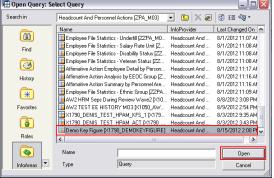


The Demo Key Figure query displayed through Excel

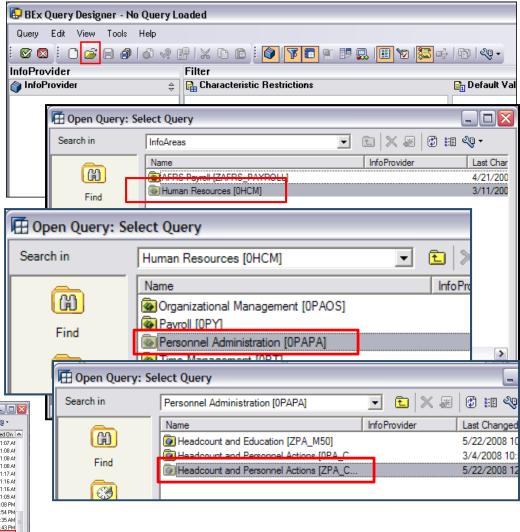


The example below uses a sample ad hoc query from the Headcount and Personnel Actions InfoProvider to show how to open, modify, and run an ad hoc query from BEx Query Designer:

- 1. From BEx Query Designer, click the Open Query icon .
- 2. Click on the InfoAreas tab.
- 3. Expand the Human Resources InfoArea.
- 4. Expand the Personnel Administration InfoArea.
- 5. Expand the Headcount and Personnel Actions InfoProvider.
- 6. Find the query you want to open, select it.
- 7. Click Open.



Modifying an Existing Ad Hoc Query

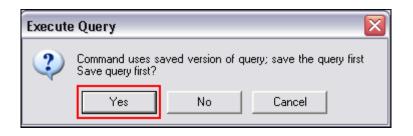


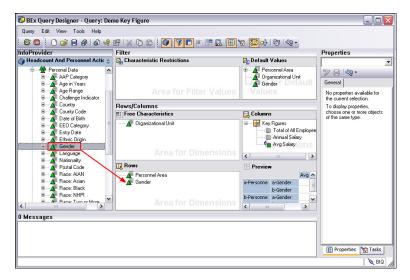
Modifying an Existing Ad Hoc Query

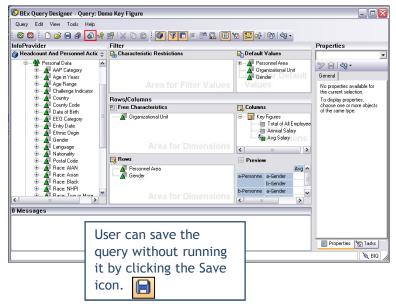
Result: The query is ready for modifications.

To modify the ad hoc query:

- 1. Drag&Drop the Gender Characteristic from the Personal Data Dimension to the Rows section of the query under Personnel Area.
- 2. Click the "Display Query on the Web" icon.
- 3. At the Execute Query box, click Yes to save and run ad hoc query.







Modifying an Existing Ad Hoc Query

Result: The Variables screen is displayed.

- 4. Enter query Variable(s).
- 5. Click the OK icon.



Result: The modified ad hoc query will be displayed on the Web



Deleting an Existing Ad Hoc Query

It is important BW/BI Power Users manage the number of ad hoc queries they have. Ad hoc queries that are no longer being used need to be deleted by the BW/BI Power User who created them.

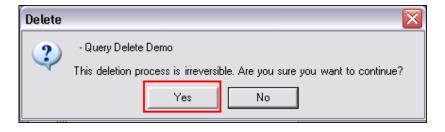
The example below uses a sample ad hoc query ("Delete Demo") to show how to delete an ad hoc query.

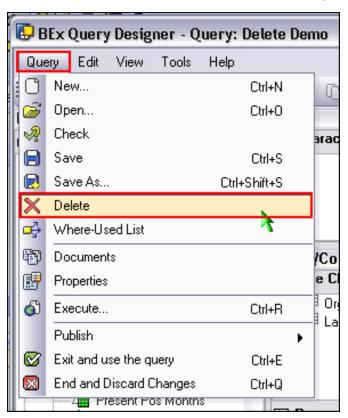
To delete an ad hoc query that has been opened in BEx Query Designer:

1. Click the Query options from the BEx Query Designer toolbar.

2. At the prompt, "Query [Query Name]

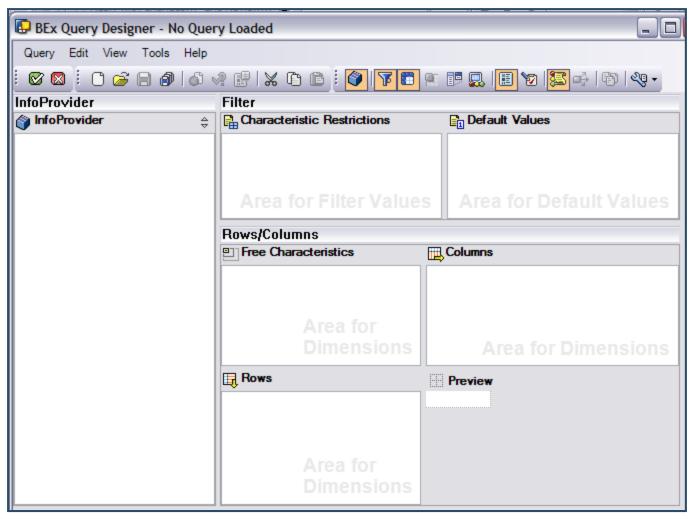
This deletion process is irreversible. Are you sure you want to continue? If you are sure, click Yes.





Deleting an Existing Ad Hoc Query

Result: The sample ad hoc query, "Delete Demo", is deleted. The BEx Query Designer screen will be blank.



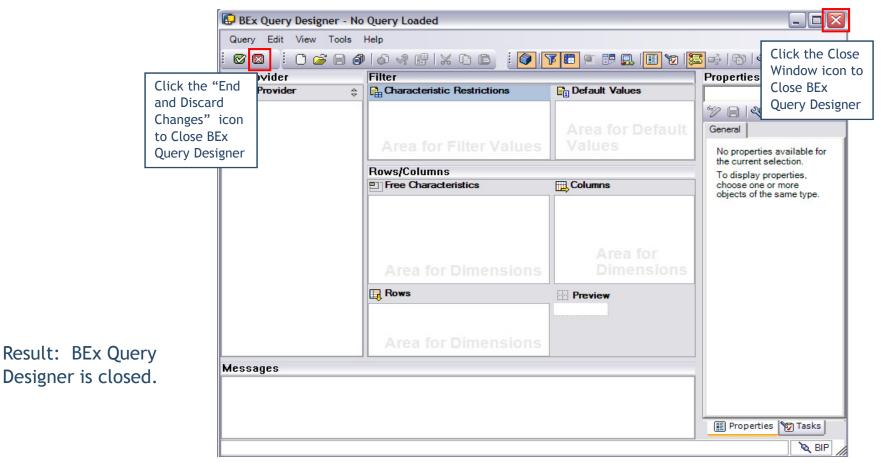
Closing BEx Query Designer

To close BEx Query Designer:

1. Click the "End and Discard Changes" 🔣 icon from the toolbar.

OR

1. Click the Close Window ☑ icon.



Change BW/BI Password via SAP GUI

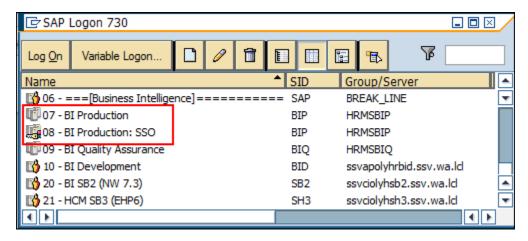
To change your BW/BI Password, this is done from the SAP Logon Icon:

1. Double-click the SAPlogon icon on the desktop.



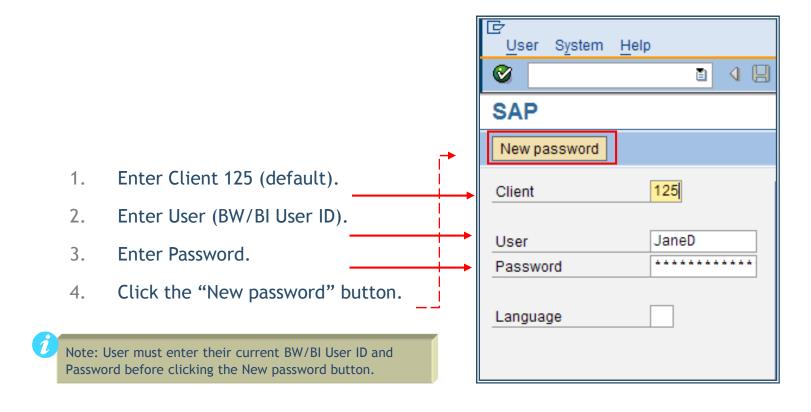
Result: The SAP Logon Pad will be displayed.

2. Select the HRMS Business Intelligence option you need (if you are single sign on, you don't need to change your password):



Change BW/BI Password via SAP GUI

Result: User will be prompted to logon.



Change BW/BI Password via SAP GUI

Result: The SAP new password screen will be displayed.

